

AMENDMENTS TO THE CLAIMS

Claims 1 to 22 (Cancelled)

23. (Currently Amended) A method for producing a vehicle brake assembly comprising the steps of:

providing a drum brake shoe assembly having a pair of brake shoes, the drum brake shoe assembly part of a drum-in-hat parking and emergency brake of a drum-in-hat disc brake assembly;

providing a backing plate having a centrally located first aperture formed therein, the backing plate adapted to support a drum brake shoe assembly of a drum-in-hat parking and emergency brake;

providing a drum-in-hat adapter formed by subjecting a suitable material to a metal stamp forming process to produce a one piece stamp formed drum-in-hat adapter having an abutment member and a pair of ears formed therewith by the metal stamp forming process, the one piece stamp formed drum-in-hat adapter having a centrally located second aperture and a plurality of smaller mounting apertures formed therein about the centrally located second aperture thereof, the abutment member protruding from the one piece stamp formed drum-in-hat adapter and including an appropriately shaped profile for directly receiving an associated end of the pair of brake shoes of the drum brake shoe assembly; and

securing the drum brake shoe assembly, the backing plate and the drum-in-hat adapter relative to one another.

24. (Original) The method of Claim 23 wherein the backing plate includes at least one raised hollow projection and the one piece stamp formed drum-in-hat adapter includes at least one raised solid projection which is adapted to be received into the at least one raised hollow projection and is subjected to a metal forming operation to secure the backing plate to the one piece stamp formed drum-in-hat adapter.

25. (Original) The method for producing the vehicle brake assembly of Claim 23 wherein the one piece stamp formed drum-in-hat adapter functions as an axle flange and is adapted to be secured to a vehicle axle tube.

26. (Original) The method for producing the vehicle brake assembly of Claim 23 and further including the steps of providing an axle flange and an axle tube, securing the one piece stamp formed drum-in-hat adapter to the axle flange, and securing the axle flange to the axle tube whereby the axle tube extends through the centrally located first and second apertures of the backing plate and the one piece stamp formed drum-in-hat adapter, respectively.

27. (Original) The method for producing the vehicle brake assembly of Claim 23 wherein the one piece stamp formed drum-in-hat adapter is formed from carbon steel or a high strength low alloy material.

28. (Original) The method for producing the vehicle brake assembly of Claim 23 wherein the one piece stamp formed drum-in-hat adapter is formed having a generally uniform thickness of approximately 12.5 mm (approximately 0.5 inches).

29. (Original) The method for producing the vehicle brake assembly of Claim 23 further including the step of providing a disc brake caliper assembly, and wherein each of the ears of the one piece stamp formed drum-in-hat adapter is provided with a hole formed therein and adapted to receive a fastener for attaching the disc brake caliper assembly of the drum-in-hat disc brake assembly to the one piece stamp formed drum-in-hat adapter.

30. (Original) The method for producing the vehicle brake assembly of Claim 23 wherein the appropriately shaped profile of the abutment includes a pair of opposed slots or recesses formed therein.

31. (Currently Amended) A method for producing a vehicle drum-in-hat disc brake assembly having a disc service brake and a drum-in-hat parking and emergency brake comprising the steps of:

providing a backing plate having a centrally located first aperture formed therein;

providing a drum brake shoe assembly of the drum-in-hat parking and emergency brake; and

providing a drum-in-hat adapter formed by subjecting a suitable material to a metal stamp forming process to produce a one piece stamp formed drum-in-hat adapter having an abutment member and a pair of ears formed therewith by the metal stamp forming process, the one piece stamp formed drum-in-hat adapter having a centrally located second aperture and a plurality of smaller mounting apertures formed therein about the centrally located second aperture thereof, the abutment member protruding from the one piece stamp formed drum-in-hat adapter and including an appropriately shaped profile for directly receiving an associated end of the pair of brake shoes of the drum brake shoe assembly; and

supporting the drum brake shoe assembly relative the backing plate; and

securing together the backing plate and the one piece stamp formed drum-in-hat adapter.

32. (Original) The method for producing the vehicle drum-in-hat disc brake assembly of Claim 31 wherein the backing plate includes at least one raised hollow projection and the one piece stamp formed drum-in-hat adapter includes at least one raised solid projection which is adapted to be received into the at least one raised hollow projection and subjected to a metal forming operation to secure the backing plate to the one piece stamp formed drum-in-hat adapter.

33. (Original) The method for producing the vehicle drum-in-hat disc brake assembly of Claim 31 wherein the one piece stamp formed drum-in-hat adapter functions as an axle flange and is adapted to be secured to a vehicle axle tube.

34. (Original) The method for producing the vehicle drum-in-hat disc brake assembly of Claim 31 and further including the steps of providing an axle flange and an axle tube, securing the one piece stamp formed drum-in-hat adapter to the axle flange, and securing the axle flange to the axle tube whereby the axle tube extends through the centrally located first and second apertures of the backing plate and the one piece stamp formed drum-in-hat adapter, respectively.

35. (Original) The method for producing the vehicle drum-in-hat disc brake assembly of Claim 31 wherein the adapter is formed from carbon steel or a high strength low alloy material.

36. (Original) The method for producing the vehicle drum-in-hat disc brake assembly of Claim 31 wherein the adapter is formed having a generally uniform thickness of approximately 12.5 mm (approximately 0.5 inches).

37. (Original) The method for producing the vehicle drum-in-hat disc brake assembly of Claim 31 further including the step of providing a disc brake caliper assembly, and wherein each of the ears of the one piece stamp formed drum-in-hat adapter is provided with a hole formed therein and adapted to receive a fastener for attaching the disc brake caliper assembly of the drum-in-hat disc brake assembly to the one piece stamp formed drum-in-hat adapter.

38. (Original) The method for producing the vehicle drum-in-hat disc brake assembly of Claim 32 wherein the appropriately shaped profile of the abutment includes a pair of opposed slots or recesses formed therein.

39. (Currently Amended) A method for producing a drum-in-hat adapter adapted for use in a vehicle drum-in-hat disc brake assembly comprising the steps of:  
subjecting a suitable material to a metal stamping process to produce a one piece stamp formed drum-in-hat adapter having an abutment member and a pair of ears formed integral therewith by the metal stamping process, the abutment member protruding from the one piece stamp formed drum-in-hat adapter including an appropriately shaped profile adapted to directly receive an associated end of a pair of brake shoes of a drum brake shoe assembly of a drum-in-hat parking and emergency brake of the drum-in-hat disc brake assembly.

40. (Original) The method for producing the drum-in-hat adapter drum-in-hat adapter of Claim 39 wherein the one piece stamp formed drum-in-hat adapter further includes a centrally located aperture and a plurality of smaller mounting apertures formed therein about the centrally located aperture thereof.

41. (Original) The method for producing the drum-in-hat adapter of Claim 39 wherein the one piece stamp formed drum-in-hat adapter is formed having at least one raised solid projection formed thereon.

42. (Original) The method for producing the drum-in-hat adapter of Claim 39 wherein the one piece stamp formed drum-in-hat adapter is formed from carbon steel or a high strength low alloy material.

43. (Original) The method for producing the drum-in-hat adapter of Claim 39 wherein the one piece stamp formed drum-in-hat adapter is formed having a generally uniform thickness of approximately 12.5 mm (approximately 0.5 inches).

44. (Original) The method for producing the drum-in-hat adapter of Claim 39 wherein the appropriately shaped profile of the abutment includes a pair of opposed slots or recesses formed therein.

45. (Original) A one piece stamp formed drum-in-hat adapter produced according to the method of Claim 39.